Bonneville Power Administration Fish and Wildlife Program FY99 Proposal

Section 1. General administrative information

Public Fisheries Education/Enhanced Protection Of Resident/Esa Species

Bonneville project number, if an ongoing project 9202406

Business name of agency, institution or organization requesting funding Montana Fish, Wildlife and Parks

Business acronym (if appropriate) MFWP

Proposal contact person or principal investigator:

NameCaptain Mack LongMailing Address3201 Spurgin RoadCity, ST ZipMissoula, MT 59804

 Phone
 1-406-542-5512

 Fax
 1-406-542-5529

 Email address
 mackl@mt.gov

Subcontractors.

Organization	Mailing Address	City, ST Zip	Contact Name
NONE			

NPPC Program Measure Number(s) which this project addresses.

Program Measures 10.1, 10.1A, 10.1B, 10.3.13

NMFS Biological Opinion Number(s) which this project addresses.

62FR32268, 56FR58619, 57FR14653

Other planning document references.

Montana Bull Trout Restoration Plan, Montana Bull Trout Restoration Team, 1997 Montana Westslope Cutthroat Trout Restoration Plan, Montana Westslope Cutthroat Restoration Team, in preparation. Fish Passage and Habitat Improvement in the Upper Flathead River Basin, Knotek et al, 1997

Flathead Basin Commission Biennial Report, 1995-96

Bull Trout Status Reports, Montana Bull Trout Scientific Group, 1995.

Increased Levels of Harvest and Habitat Law . . . Col. River Basin, 1992-94, BPA, 1995.

Angler's Ability to Identify Bull Trout and Other Salmonid Species Found in Northwest Montana, Montana Fish, Wildlife & Parks, 1995.

Analysis of Management Issues, . . . Draft Fisheries Enf Mgmt Plan . . .west central Montana, Vigg, 1997.

Region One Public Information Plan Evaluation, Fisheries Management Study, Montana Fish, Wildlife & Parks, 1996

Subbasin.

Clark Fork, Blackfoot, Bitterroot, Kootenai, Stillwater, Bob Marshall, Flathead, Swan, and numerous sub-basins

Short description.

Enhance the MFWP resident and ESA fisheries education and enforcement effort through increased public awareness, coordination, and accountability.

Section 2. Key words

Mark	Programmatic Categories	Mark	Activities	Mark	Project Types
	Anadromous fish		Construction	X	Watershed
X	Resident fish	*	O & M	*	Biodiversity/genetics
	Wildlife		Production	*	Population dynamics
	Oceans/estuaries		Research	*	Ecosystems
	Climate	*	Monitoring/eval.		Flow/survival
	Other	X	Resource mgmt	*	Fish disease
		*	Planning/admin.	*	Supplementation
		*	Enforcement	*	Wildlife habitat en-
			Acquisitions		hancement/restoration

Other keywords.

awareness, education, protection, threatened, endangered, species.

Section 3. Relationships to other Bonneville projects

Project #	Project title/description	Nature of relationship

Section 4. Objectives, tasks and schedules

Objectives and tasks

	ctives and tasks	To -1-	
Obj	Objective	Task	Task
1,2,3	Objective Educate the public on issues	a,b,c	
1	Educate the public on issues that affect bull trout, resident, &	a	Increase public education/ awareness on the effects of illegal
	ESA fish recovery and		take, illegal introductions, water
	protection		quality and habitat degradation in
	protection		Western Montana on the Columbia
			River Basin native resident and
			ESA fish species.
			EST Tish species.
		b	Enhance the public awareness and
			deterrent effect of various
			education/enforcement efforts.
		С	Maintain two FTE's to coordinate
			the educational material
			distribution, schedule and give
			presentations, document
			education/enforcement activities,
			prepare quarterly reports on budget
			and ed/enf. activities
		d	Develop measurement criteria and
			methods to evaluate the
			effectiveness of public awareness,
			deterrence, and willingness to
			comply with the laws and rules for
			the protection of depleted fish
	Donalds subsect C		stocks and their habitat.
2	Provide enhanced enforcement	a	Continue the development of
	of laws and rules for the protection of E.S.A. and native		enforcement efforts for protection of critical habitat for native,
	fish throughout western		resident, and ESA threatened
	Montana.		fishes.
	Montana.	b	Provide enhanced operations and
			equipment for 22-25 State funded
			wardens to conduct education and
			enforcement emphasis programs
			and special operations.
		С	Continue and improve a reporting
			system (via action plans and after
			action critiques) for use by officers

			for development of protection strategies to enhance depleted fish stocks.
3	Maximize the accounability of the education/enforcement effort and achievement of results for the protection of fish via monitoring and evaluation of the effectiveness of the program in terms of qualitative and quantitative performance criteria.	a	Develop performance standards and specific quantitative and qualitative criteria to objectively measure achievement results.
		b	Collect and summarize law enforcement effort statistics using a consistent scientifically valid methodology, and document the results of the enhanced law enforcement program through quarterly progress reports, and annual completion reports.
		С	Adaptively manage the education/enforcement program by making necessary changes as indicated by performance measures.

Objective schedules and costs

Objective #	Start Date mm/yyyy	End Date mm/yyyy	Cost %
1	1/1999	1/2000	68.00%
2	1/1999	1/2000	28.00%
3	1/1999	1/2000	4.00%
			TOTAL 100.00%

NONE

Completion date.

2010

Section 5. Budget

FY99 budget by line item

Item	Note	FY99
Personnel	Two FTE's	\$42,000
Fringe benefits		
Supplies, materials, non-	Equipment for enhanced	\$20,000
expendable property	education/enforcement project	
Operations & maintenance		\$34,000
Capital acquisitions or	None	
improvements (e.g. land,		
buildings, major equip.)		
PIT tags	# of tags: None	
Travel	Budget for participation in CBLEC	\$2,400
	process.	
Indirect costs	Differential pay for 22-25 State funded	\$10,000
	wardens.	
Subcontracts	None	
Other	Administrative overhead	\$15,293
TOTAL		\$123,693

Outyear costs

Outyear costs	FY2000	FY01	FY02	FY03
Total budget	\$127,403	\$131,225	\$135,161	\$139,216
O&M as % of total	45.00%	45.00%	45.00%	45.00%

Section 6. Abstract

THIS PROPOSAL IS DIVIDED INTO TWO PARTS.

Part One addresses the need of the general public, school children, private landowners and other resource agencies who need to be educated on the plights and perils facing the recovery of bull trout, Kootenai white sturgeon and other salmonids in western Montana. It also addresses the public's inability to properly identify bull trout and salmonids. Presentations will be given to fourth grade students, the general public, sportsman/women organizations, etc. in western Montana. In addition, all field contacts will also be used as an educational opportunity. Fish ID will be an essential element of this program. Preand post-educational surveys using consistent, scientifically valid methodology will be done. M & E along with adaptive management will insure success. Base line study was done in 1995/1996.

Part Two allows enhanced protection of these species at critical periods during spawning, staging, and migration. The expected outcome is increased fish survival, success of fishery management goals, and increased compliance. Program will be monitored through angler surveys, public attitude, biological, and redd count statistics.

Section 7. Project description

a. Technical and/or scientific background.

The <u>Bull Trout Restoration Activities Report to the Governor</u> identifies a static or decline in bull trout populations in a number or watershed groups within western Montana. Currently there are nine Watershed groups. In three of these groups there is no monitoring of bull trout. Numbers of bull trout have increased in one Watershed, remained stable in three and declined in two. The Montana Bull Trout Restoration Team recommended specific actions to reduce threats to bull trout in accordance with the Endangered Species Act. The recommendations included efforts to reduce the over utilization of bull trout for commercial, recreational, scientific or educational purposes. Changes made in the Montana fishing regulations to reduce harvest of bull trout have to some degree addressed these recomendations. These regulations are implemented and enforced by the MFWP Law Enforcement Division.

The role of law enforcement in Columbia Basin fish restoration has been described in a report to the U. S. Department of Energy and Bonneville Power Administration by Mack Long. (Long, et al., 1995) as a critical element in any fish or wildlife program. The same report clearly demonstated that the enhanced education/enforcement effort had an immediate effect on fish protection in the state of Montana, especially from Information and Education programs designed to increase the public visibility concerning the protection of ESA fish and bull trout. This was accomplished throught enhanced education & enforcement through additional funds from BPA above and beyond state funding.

Section III (d) of the <u>Bull Trout Restoration Activities Report to the Governor</u> recommended to strengthen Montana's fishing regulations to include "No intentional fishing for bull trout" to reduce impacts from targeting bull trout for catch and release; "Closure of several stream mouths" to reduce hook and release mortality, and an "Increase in civil restitution" by the Montana legislature for the possession of bull trout larger than eighteen inches from \$10.00 to \$500.00.

Section III (e) called for increased warden patrols and angler contacts, working with hunting and fishing license agents, public agencies and private industry to distribute bull trout materials, presentations to schools, organizations and the general public with a focus on native fish and bull trout.

Fisheries Manager, Jim Vashro, in a memo to Larry Peterman, recognized enforcement patrols as a tool used to educate the public about bull trout.

Montana Fish, Wildlife & Parks currently manages bull trout in western Montana. A survey of fisheries managers in the 1997 Analysis of Management Issues, Public Opinion and Performance Framework, identified enforcement as an integral part of any fisheries management plan.

In the same publication, a summary of the public opinion poll shows an overall majority of respondents were in favor or ranked at or near the top regarding their answers to the following topics:

- 1. Fish poaching was an area of importance in which game wardens could do a better job of protecting Montana's fishery.
- 2. Fisheries enforcement was an essential management tool for all fishery resources.
- 3. Fisheries law enforcement is an essential component of fisheries management for the conservation and enhancement of depleted resident fish in Region 2 (southwest Montana) i.e. cutthroat and bull trout.
- 4. More fisheries law enforcement presence was necessary to protect fish.
- 5. Protecting resident fish populations in Montana is a priority.
- 6. It was important to provide information to inexperienced anglers to prevent violations or unintentional taking of protected species.

In the Angler=s Ability to Identify Bull Trout and Other Salmonid Species Found in Northwest Montana survey (Kelly et al, 1996)and other reports(Long et al. 1997)(Long & Whalen, 1997), It was determined that it was necessary to have an increased education program with regards to fish identification. With proper fish identification comes a normal reduction of unintentional take. It was also noted education was essential to conservation efforts, which included restoration of bull trout and other native species.

b. Proposal objectives.

- 1. MFWP proposes to educate the public on issues that affect bull trout, resident, & ESA fish recovery and protection.
- 2. Provide enhanced enforcement of laws and rules for the protection of E.S.A. and native fish throughout western Montana in response to public opinion, fish

- management goals, and legislative changes made by the Montana State Legislature specific to the protection of bull trout.
- 3. Maximize the accountability of the education/enforcement effort and achievement of result for the protection of fish via monitoring and evaluation of the program in terms of qualitative and quantitative performance criteria. This would include the management of budgets and oversight of material distribution as well as developing measurable criteria and reporting of results.

c. Rationale and significance to Regional Programs.

Without education and enforcement any recovery plan for native and threatened fish is doomed to failure. No project being undertaken to restore native and threatened fish species can succeed without public support gained through intensive education efforts and continual protection of fish populations and their critical habitat by game wardens. Current fish management practices in Northwest Montana are targeting the recovery of native fish populations. Fisheries managers surveyed, identified bull trout as the number one fish species in need of protection and westslope cutthroat trout as second (Long et al. 1996). Resident anglers in Montana were able to correctly identify bull trout 57.7% of the time. Non-Resident anglers were able to correctly identify bull trout 47.7% of the time (Kelly et al. 1996). In essence, half of the bull trout harvested in Northwest Montana were misidentified as another species. Fisheries managers surveyed identified fisheries education and law enforcement as critical components of recovery efforts as well as essential management tools (Long et al. 1996). In order for recovery efforts in Montana to be successful, public education and law enforcement must be included as a component of every project.

d. Project history

The project was started in July 1994 with funding from Bonneville Power Administration. This funding was for increased and enhanced levels of education and enforcement throughout Northwest Montana to reduce the illegal harvest of resident fishes and increased protection of endangered or threatened species and species of special concern.

This has generated several publications regarding the plight of bull trout/ESA/and threatened species including:

- 1. Analysis of Management Issues, Public Opinion and Performance Framework to Assist in the Development of a Draft Fisheries Enforcement Management Plan for Region 2, West Central Montana. Final Report. By Mack Long et al. 1996.
- 2. <u>Angler=s Ability to Identify Bull Trout and Other Salmonid Species</u> Found in Northwest Montana. By Ed Kelly et al. 1996.

- 3. Increased Levels of Harvest and Habitat Law Enforcement and Public Awareness For Anadromous Salmonids and Resident Fish in the Columbia River Basin Demonstration Period 1992-1994. Final Report. By Mack Long 1995.
- 4. Sociological Implications of Bull Trout Management In Northwest Montana: Illegal Harvest and Game Warden Efforts to Deter Poaching. By Long and Whalen 1996.

In addition, funding provided two law enforcement FTEs whose primary duties involved coordinating and implementing the law enforcement division's education effort as well as enforcing regulations for the protection of native fish. Funding also provided differential pay and operations money for an additional twenty-eight field wardens involved in bull trout protection.

Data was collected from all field wardens in northwest Montana. Data was collected on a standardized form for CBLEC. This information is computerized for the entire Columbia Basin. Current measurements can be recorded by river segment or drainage. Compliance rates can be achieved for these areas. Over a period of time, the information can be used to identify problem areas for increased focus. An increase in compliance will generate protection for ESA species and species of special concern.

During 1996 wardens contacted 16,307 anglers and detected 1,022 violations. In addition, wardens investigated 94 case's related to species protection. Twelve check stations were operated to aid in the detection of violations. MFWP personnel attended sixteen CBLEC meetings.

A series of action plans were developed targeting areas of special concern such as bull trout spawning redds and backcountry areas associated with bull trout populations and not on normal patrol routes for game wardens. Additionally, major watersheds were targeted for educational saturation patrols to enhance angler's abilities to identify the fish they were catching, to increase public awareness of the plight of bull trout, and to provide a strong enforcement presence. Thirty-nine saturation patrols were conducted and seventy-nine backcountry patrols took place in 1996. After-action reports were analyzed to determine successes and failures.

A wide variety of educational materials were developed and distributed. This included key chains, posters, bumper stickers, fair displays, fish ID boards, visual aids, and hands-on demonstrations, which were presented and distributed at public meetings, school presentations, fair booths, and field contacts. Wardens gave 132 educational presentations and attended 16 sportsman meetings in 1996.

In addition, regulation changes closing all waters to the intentional fishing for bull trout as well as legislative changes increasing civil restitution for unlawful possession of bull trout exceeding 18 inches from \$10 to \$500. Equipment was purchased to enable field wardens to better contact the public, thereby increasing the dissemination of educational materials and enhancing the law enforcement deterrent.

In-house training was provided to MFWP employees to educate fisheries managers and enforcement officers concerning bull trout restoration and CBLEC efforts on the behalf of native fish species.

MFWP met with other states to coordinate efforts for the protection of these species and to develop viable action plans that would aid in the recovery of threatened native species as well as sharing educational ideas and plans.

e. Methods.

The methods that will be employed to carry out the proposal are:

- 1. Two FTEs to meet objectives 1, 2, 3, by:
- Develop criteria through programmatic {fisheries, enforcement, I&E}to evaluate the outcomes of the enhanced education/enforcement effort.
- Overseeing the ordering and distribution of educational materials related to the protection of ESA fish and bull trout.
- Coordinating public education activities and scheduling of public meetings to address fish protection.
- Overseeing expenditures and accounting for money in the budget for protection of bull trout and critical habitat.
- Free up sworn officers for the purpose of making informative field enforcement contacts.
- Report on the results of the education/enforcement effort through quarterly and yearend reports.
- Coordinate yearly strategy through development and implementation of Action Plans and evaluation of After Action Plans.
- Give educational presentations as requested.
- 1. The use of differential pay will meet the objectives of the proposal by increasing the field time of 22-25 sworn officers to:
- Optimize educational field contacts of anglers to assist in their ability to identify fish.
- Enforce statutes passed by the Montana Legislature designed to discourage the poaching of, or intentional taking of bull trout, cutthroat, and ESA species through stiffer sentencing and revocation of fishing privileges.
- Enhance the high visibility deterrent to the illegal taking of bull trout and native fish.
- 1. Equipment purchases will help to meet the proposal objectives by:
- Providing essential field equipment to assist in the educational effort of the Enforcement, I&E and Fisheries Divisions.
- Provide educational materials for distribution to the public on bull trout and native fish species. Through this distribution anglers will be better able to identify fish.

f. Facilities and equipment.

Equipment already purchased through BPA funding will be used. Office facilities will be provided by MFWP. Vehicles and numerous other equipment items will be provided by MFWP

g. References.

Long, et al, February 1997, Analysis of Management Issues, Public Opinion and Performance Framework – to Assist in the Development of a Draft Fisheries Enforcement Management Plan for Region 2, West Central Montana. Final Report. Montana Fish, Wildlife & Parks, Missoula, Montana.

Montana Bull Trout Restoration Team, March 1997, <u>Bull Trout Restoration Activities</u> Report to the Governor.

Kelly, et al, June 1996, <u>Angler=s Ability to Identify Bull Trout and Other Salmonid Species Found in Northwest Montana</u>.

Long, et al, June 1995, Increased Levels of Harvest and Habitat Law Enforcement and Public Awareness For Anadromous Salmonids and Resident Fish in the Columbia River Basin – Demonstration Period 1992-1994. Final Report. DOE/BP-28111-1, Bonneville Power Administration, Portland, Oregon.

Long, M. H. 1997, Sociological Implications of Bull Trout Management In Northwest Montana: Illegal Harvest and Game Warden Efforts to Deter Poaching. Bull Trout Task Force, Alberta, Calgary, Canada.

Section 8. Relationships to other projects

Blackfoot Watershed Telemetry Project: Currently, the MFWP fisheries managers are engaged in telemetry studies of Cutthroat trout and have cited misidentification of fish species as a key problem area in the study. A memo form MFWP Commissioner, Stan Meyer, also referenced the problem. The MFWP enforcement division has conducted extensive research on the fish identification problem (Long et al, 1996) and concluded that an extensive education effort would be required to help anglers improve their ability to identify the species that they are harvesting. In addition many fish would be saved through an effort to educate anglers, particularly in rural areas, of the importance of native fish species and their significance in the Blackfoot Watershed and it's tributaries. bull trout spawning grounds in the Blackfoot Watershed are in areas of high use by recreationists. The fisheries managers specifically referred to Forest Service campgrounds along known spawning areas. An intense education effort in the form of fireside talks and leaflet distribution would aid in the protection of fish.

<u>The Rock Creek Watershed Telemetry Project:</u> Currently Region Two fisheries managers are managing fish populations with an emphasis on native fish species. In Rock Creek,

telemetry projects are being conducted to determine biologically sound management principles for these native species including bull trout. Key problems that have been identified could be addressed by this project proposal are misidentification of protected fish and the intentional harvest of protected species. In addition, user conflicts based on social rather than biological issues could be addressed. Special regulations have been affected for the protection of these fish species but misidentification remains the central problem.

<u>Bitterroot Watershed Recovery Projects:</u> Four tributaries and one stem of the Bitterroot River have been targeted for native fish species management. The tributaries have special regulations adopted for the protection of naïve fish. These tributaries are traditional fishing holes for area residents. Protection of these fish is essential and a high number of educational field contacts would help reduce accidental as well as intentional harvest of these species.

<u>Clarkfork Watershed Native Fish Protection:</u> Fisheries managers have identified the high concentrations of bull trout at the confluence of tributaries during warm water months, making them highly susceptible to illegal or accidental harvest as a direct threat to their population numbers. Fisheries managers interviewed identified high education-enforcement presence as crucial to the recovery effort.

Illegal introduction of non-native fish species is an area of high concern to fish managers attempting to recover native fish populations (Managers Survey, Long et al. 1996). Education/enforcement contacts and public presentations targeting this problem would reduce the number of incidents as public awareness of the problem increased.

Public presentations given by wardens including Fair displays, public meetings, sports shows, campfire talks in the parks system, and field contacts would be enhanced by this project.

Currently there are several projects in various stages of completion that relate to the fisheries enforcement effort to recover and protect bull trout. In the Flathead River system there are five projects affected by protection of bull trout and one lesser project in the Koocanusa Reservoir area.

<u>Hungry Horse Reservoir Draw Down Mitigation Project</u>. The Hungry Horse Reservoir is a severely fluctuating reservoir. It was recognized that this fluctuation has a drastic effect on spawning habits of bull trout and other native fishes. If the level of the reservoir can be monitored and stabilized, fish production can increase. When fish populations increase, the opportunity to intentionally poach vulnerable fish increase as do the unintentional harvest of fish by uninformed anglers. The draw down project is currently in place and ongoing.

<u>Culvert Replacement Project</u>. There were five road culverts, which were replaced within the Hungry Horse Reservoir fishery corridor. These culverts allowed bull trout to access

previously unreachable tributaries that are crucial to spawning. With the improvements to the tributary, bull trout are able to Astack up≅ at the culvert locations, thus presenting opportunity for intentional poaching to take place.

Fish Passage Project on Hay Creek of the North Fork of the Flathead River. A fish passage was constructed on Hay Creek which allowed bull trout to migrate to spawning areas along a 12 mile stretch which was previously unusable. Documentation has shown that fish are most vulnerable when Astacked up≅ and when they are in the redds. Wardens would need to patrol this area of spawning to reduce and discourage intentional take of bull trout.

<u>Predator Prey Relationships on the main Flathead River</u>. A predator-prey relationship study is in progress on the lower stretch of the main Flathead River. This study also includes man as part of the prey being studied and what can be done to alleviate some of the man caused mortality to bull trout. Wardens, while on patrol, can be alert to man caused bull trout mortality potentials.

<u>Big Creek Sediment Removal Project</u>. The Fisheries Division is in the process of removing sediment in Big Creek to improve the spawning habitat for bull trout. Again, the same argument exists if there are bull trout in the area of improvement, enforcement needs to have a presence to reduce and discourage the intentional take of bull trout.

<u>Koocanusa Reservoir</u>. This reservoir although not yet in the forefront of reservoir fluctuations and fish production, has the same problems the Hungry Horse Reservoir has in relation to fish production. Once there has been headway on this obstacle, enforcement presence would need to be increased to address the same poaching potential as seen with the Hungry Horse Reservoir. Although poaching is a problem at this juncture, the potential for increased poaching would multiply.

The Enforcement Division=s role and commitment to these projects and future projects, rests directly with its ability to increase its patrol tactics. With limited patrol abilities, it would be certain the division=s ability to patrol with effectiveness would not be reached.

Section 9. Key personnel

MACK LONG

3201 Spurgin Road ∃ Missoula, MT 59804 ∃ (406) 542-5512

OBJECTIVE

Participation in Montana Public Fisheries Education/Enhanced Protection Of Resident/ESA Species.

EXPERIENCE

MONTANA FISH, WILDLIFE AND PARKS

3201 Spurgin Road

MISSOULA, MONTANA

GAME WARDEN CAPTAIN FOR REGION 2, WEST CENTRAL MONTANA, (1994 TO PRESENT)

- * RESPONSIBLE FOR PROGRAM DEVELOPMENT AND MANAGEMENT
- * PERSONNEL: TRAINING, CAREER DEVELOPMENT, SUPERVISION
- * LEADERSHIP RESPONSIBILITIES
- * PROGRAM ADMINISTRATION
- * DEVELOP PARTNERSHIPS WITH GENERAL PUBLIC AND OTHER AGENCIES

Accomplishments

- * successfully developed and implemented several programmatic approaches to resource management and resource protection.
- * develop and implement a AFisheries Enforcement Management Plan≅.
- * Oversee BPA funded, Enhanced Education and Enforcement Program

MONTANA FISH WILDLIFE AND PARKS

490 N. MERRIDIAN

KALISPELL, MONTANA 59901

GAME WARDEN SERGEANT, REGION 1, NORTHWEST MONTANA (1992 TO 1994)

- * FIRST LINE SUPERVISOR FOR ALL R-1 WARDENS
- * BUDGET DEVELOPMENT AND IMPLEMENTATION
- * PERSONNEL SUPERVISION
- * MULTI AGENCY COORDINATION
- * SUPERVISED ENFORCEMENT ACTIVITIES IN BOB MARSHAL WILDERNESS
- * DEVELOPED AND IMPLEMENTED BULL TROUT PROTECTION PROGRAM

MONTANA FISH, WILDLIFE AND PARKS

95 WOOD WAY

LIBBY, MONTANA

GAME WARDEN (1989 TO 1992)

- * DEVELOPED ENFORCEMENT PROGRAM FOR NW MONTANA
- * ORGANIZED ALL PATROLS AND SPECIAL ENFORCEMENT ACTIVITIES
- * DEVELOP AND IMPLEMENT EDUCATIONAL PROGRAMS AND PRESENTATIONS
- * COORDINATE WITH FIELD BIOLOGISTS

MONTANA FISH, WILDLIFE AND PARKS BILLINGS, MONTANA GAME WARDEN (1988 TO 1989)

- * ENFORCEMENT ACTIVITIES FOR BILLINGS AREA
- * PATROL AND ADMINISTRATIVE DUTIES
- * WORKED WITH SPECIAL INVESTIGATION SECTION

KANSAS FISH AND GAME HAYSVILLE, KANSAS GAME WARDEN (1984 TO 1988)J

- * ENFORCEMENT ACTIVITIES FOR WICHITA, KS AREA
- * EDUCATIONAL ACTIVITIES FOR WICHITA, KS AREA

EDUCATION

EMPORIA STATE UNIVERSITY EMPORIA, KANSAS BIOLOGICAL SCIENCES

WICHITA STATE UNIVERSITY WICHITA, KANSAS ADMINISTRATION OF JUSTICE BIOLOGICAL SCIENCE B.S. DEGREE

SGT. JOE JAQUITH

516 S. 3rd ∃ Hamilton, Mt. 59840 ∃ 406-363-5044

PURPOSE

Participation in Montana Public Fisheries Education/Enhanced Protection Of Resident/ESA Species.

EXPERIENCE

Montana Fish, Wildlife, Parks

Sergeant, January 1995 - Present.

Responsibilities and accomplishments.

Supervision of four full time wardens.

Supervision of 1-2 part time trainee wardens.

Supervision of Contract employee.

Participation in yearly planning of goals and objectives.

Management of budget.

Field patrols and investigations.

MONTANA FISH, WILDLIFE, PARKS Warden, June 1987 - January 1995 Responsibilities and accomplishments. Patrol for species protection Education

EDUCATION

EASTERN MONTANA COLLEGE

B.S., Biology, 1989

Honors, related activities, accomplishments.

Member Science Club.

Warden Trainee for Montana, Fish, Wildlife, Parks.

SKILLS

X Experienced first line supervisor Experienced budget manager. Firearms instructor Field Training Officer. Experienced Project Coordinator.

M. DIANNE SCHMAUTZ

OBJECTIVE						
OBSECTIVE	employer o	and enhance professional growth in supporting bjectives through customer service, leadershipt, and expansion of technical capabilities.				
EXPERIENCE						
	1985-1995	The Boeing Company Seattle, W.				
	Cost Accou	ntant				
	 Financial Controls for government contracts, cost and schedule reporting, company operating plan for labor and non-labor costs. 					
	Military A	irplanes Computing Laison				
	 Design, develop and publish computing training manual. Conduct training work shops. Accounting issues laison. Project coordination included \$14 million computing budget exercise. 					
	Performan	ce Management Analyst				
	 Development and maintenance of customer performance measurement metrics. Performance reporting for voice and data networks. Implementation of statistical process controls. 					
	1975 - 1985 Various Employers Missoula, MT & Denver, CO					
		r,Computing Requirements Coordinator; Cost				
EDUCATION						
	1996-1997	University of Montana, College of Technology Missoula, MT A.A.S. Medical Office Technology. GPA 3.9				
	1991	Seattle Pacific University, Seattle, WA				
		Computing, Voice & Data Networks				
	1975-1977	North Seattle Community College, Seattle, WA				
		Computing, Accounting & Business Admin.				
	1965-1967	Wenatchee Valley College, Wenatchee, WA				
		Accounting & Business Administration				
		•				

Word Processing: MS Word, Word Perfect. Spreadsheets: Excell. Database: MSAccess & large scale. Graphics:

SKILLS

Charisma & Microsoft. Setup and installation of PC hardware

and software.

HEATHER PIER

490 North Meridian Kalispell, MT 59901 (406) 752-5501

OBJECTIVE

Participation in Montana Public Fisheries Education/Enhanced Protection Of Resident/ESA Species.

EMPLOYMENT

MONTANA FISH, WILDLIFE, PARKS.

1997-98
Kalispell, MT.

- X 1997-98 Supervisor: Ed Kelly, John Fraley
- X Developed Fish I.D. program. Distributed information regarding imperiled fish stocks in the form of brochures, signs. Supervised work study in collection of 1997 survey material. Analyzed data and published survey report.

MONTANA FISH, WILDLIFE, PARKS.

1997

Missoula, MT

- X 1997 Supervisor: Mack Long, Bill Thomas
- X Developed educational program for bull trout, dealing with the history, biology, and current issues.
- X Presented program to 1600 people.

EDUCATION

Name of Degree:Biology
Institution Name: University of Montana City, State

Major: Biology

Section 10. Information/technology transfer

Results of the enhanced education/enforcement program will be distributed through quarterly reports and year end reports which will include but will not be limited to anglers contacted, cases investigated, educational presentations given, backcountry and saturation patrols, covert investigations, expenditures, and an evaluation of the results.